DOCKET NO: 329864US0PCT

## IN THE UNITED STATES PATENT & TRADEMARK OFFICE

5.02

IN RE APPLICATION OF

MARKUS SCHUBERT, ET AL. EXAMINER: ZIMMER: A. J.

SERIAL NO: 10/534,457

FILED: MAY 11, 2005 : GROUP ART UNIT: 1793,

FOR: CATALYST AND METHOD FOR PRODUCING ALCOHOL BY HYDROGENATION ON SAID CATALYST

## DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

- I, Dr. Heiko Urtel, declare and state as follows:
- 1. I am a citizen of Federal Republic of Germany, residing at Nibelungenstraße 2, 67 240 Bobenheim-Roxheim, Germany. I am a fully trained chemist, studied at the University of Heidelberg from 1994 to 1999, and obtained my doctors degree from the University of Heidelberg in 2002 and joined BASF in the same year.
- 2. I am familiar with the claims, and have read the Office Action mailed May 23, 2008, in the above-identified application.
- 3. The Examiner finds that while the process recited in the claims of the above-identified application is different from that disclosed by US 2003/0195115 (Mizobuchi et al), in effect, there would appear to be no difference in the presently-claimed catalyst and the catalyst of Mizobuchi et al. The Examiner is incorrect for the following reasons.

Application No. 10/534,457 Declaration under 37 C.F.R. § 1.132

- 4. The reduction treatment of the catalyst disclosed by Mizobuchi et al is believed to be a conventional activation treatment of a catalyst prior to use. Mizobuchi et al does not disclose heat treating in a reductive atmosphere following application of their rhenium compound and prior to application of their platinum compound, which is step b) of Claim 1 of the above-identified application. This step results in a catalyst that is different from that of Mizobuchi et al. As the result of drying and heat treating in a reductive atmosphere, rhenium is in oxidation state (0), present as metallic rhenium. This is an important precondition to facilitate excellent formation of an alloy when the platinum compound is added according to step c) of said Claim 1. Bonding of the metals to each other and the support is improved. If step b) is omitted, then rhenium will be washed out at least partly when the support is impregnated with the solution of the platinum compound in step c). Performance of such a catalyst in hydrogenation processes would be poor. In addition, activation of the catalyst prior to its use does not further change the oxidation state of the rhenium but only of the platinum which is present on the catalyst surface. The platinum cations are reduced. Rhenium is after step b) present as metallic rhenium and is not altered further except if the catalyst blank is passivated after step b). Such passivation partially oxidizes the rhenium, leading to a thin layer of rhenium oxide on the rhenium surface and prevents self-heating of the catalyst and ensures a safer handling thereof.
- 5. The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

Application No. 10/534,457 Declaration under 37 C.F.R. § 1.132

6. Further declarant saith not.

Signature

1808 1003

Date

Customer Number

22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/06)